#### Research ASPIRE

(Ask, Search, Plan, Investigate, Report, Educate)

# **Program Description**

Research ASPIRE (Ask, Search, Plan, Investigate, Report, Educate) is a structured program that introduces health professions students, residents, and early-career faculty to the essential skills of academic scholarship. Through interactive workshops and mentored experiences, participants learn how to frame research questions, conduct literature searches, design studies, analyze data, and effectively communicate results. The program emphasizes ethical conduct, systematic inquiry, and scholarly writing, preparing participants to confidently engage in research and contribute to the academic community.

# **Learning Objectives**

By completing this program, participants will be able to:

# **Scientific Writing and Publishing**

- Write and organize scholarly work effectively.
- Conduct efficient literature searches (PubMed, EndNote).
- Submit manuscripts and respond effectively to peer review.
- Prepare manuscripts for submission to peer-reviewed journals.

### **Human Subjects Research and IRB Applications**

- Explain ethical principles and federal regulations.
- Determine when IRB review is required.
- Develop and submit IRB applications (including protocols, consent forms, and statistical approaches).
- Differentiate between QI, program evaluation, and research requiring IRB approval.

### Systematic Reviews and Meta-Analyses

- Formulate focused research questions using frameworks like PICO.
- Create structured search strategies.
- Screen, extract, and synthesize data systematically.

- Apply PRISMA guidelines for reporting results.
- How to use Covidence Covidence Academy

# **Critical Appraisal and Peer Review**

- Understand the purpose and ethics of peer review.
- Evaluate manuscripts for structure, clarity, and scientific rigor.
- Identify strengths and limitations in study design and analysis.
- Provide balanced, constructive feedback.

### Resources

- The PICO Framework Evidence Based Medicine Levy Library Guides at Icahn School of Medicine at Mount Sinai
- Step-by-Step Guide Covidence for Systematic Reviews Research Guides at Rutgers University
- EQUATOR Network | Enhancing the QUAlity and Transparency Of Health Research